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R&D

Academic Research and Development

Supplemental Tables

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Table SURD-1

S&E doctorate holders employed in academia, by type of position and degree field: 2003–21

(Thousands)

Type of position and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
All positions									
All fields	259.5	272.8	276.5	294.8	309.0	329.3	326.6	350.4	347.2
Physical sciences	39.9	39.6	39.9	43.7	44.9	48.4	46.3	49.8	48.1
Mathematics and statistics	16.7	17.4	18.0	18.7	19.0	20.9	19.6	20.6	20.8
Computer and information sciences	5.2	5.8	6.9	7.3	8.4	9.1	8.8	10.7	11.8
Life sciences	90.0	95.5	94.2	102.0	109.8	112.7	113.1	119.8	119.6
Psychology	31.8	35.0	34.5	35.4	36.3	38.7	37.9	39.7	38.8
Social sciences	48.1	50.0	52.5	54.9	55.9	59.7	60.4	64.8	61.3
Engineering	27.8	29.6	30.4	32.8	34.7	39.7	40.5	45.0	46.8
All full-time faculty									
All fields	190.6	193.1	199.1	206.8	214.4	227.7	223.4	246.8	243.4
Physical sciences	27.6	26.9	27.6	29.3	29.5	31.2	29.3	33.0	31.3
Mathematics and statistics	14.0	14.0	14.8	15.1	15.5	16.7	15.4	16.3	16.4
Computer and information sciences	4.2	4.9	5.7	5.8	6.4	7.1	7.0	8.6	9.6
Life sciences	61.7	62.8	63.5	66.7	70.6	70.8	70.3	77.1	76.7
Psychology	21.4	23.2	23.1	23.3	24.1	25.9	26.3	27.9	27.7
Social sciences	39.6	39.2	42.1	43.1	43.5	46.6	46.4	50.4	46.4
Engineering	21.9	22.1	22.7	23.4	25.0	29.2	28.7	33.4	35.3
Full-time professors									
All fields	87.7	85.3	90.5	93.6	95.3	98.9	94.7	109.1	107.8
Physical sciences	14.3	13.3	14.0	15.0	14.6	15.0	13.7	16.4	15.7
Mathematics and statistics	7.2	6.9	7.3	7.3	7.3	7.9	6.9	7.5	8.0
Computer and information sciences	1.2	1.6	1.9	2.2	2.6	2.6	2.7	3.3	3.7
Life sciences	25.7	25.6	26.6	28.1	29.5	28.3	27.7	31.3	31.0
Psychology	9.8	9.8	10.0	9.9	10.4	10.9	10.7	12.2	12.6
Social sciences	18.6	17.5	19.2	19.6	19.2	20.6	19.9	22.8	20.6
Engineering	10.9	10.6	11.7	11.5	11.7	13.5	13.0	15.8	16.4
Full-time associate professors									
All fields	54.3	54.1	57.0	59.1	62.7	69.3	67.7	72.9	72.0
Physical sciences	6.9	6.9	7.0	7.4	7.6	8.3	8.4	8.7	8.8
Mathematics and statistics	4.0	3.8	4.3	4.2	4.4	5.1	4.9	5.1	4.3
Computer and information sciences	1.7	1.6	1.9	2.1	2.3	2.6	2.2	2.6	2.9
Life sciences	17.7	18.1	18.2	19.1	20.3	21.4	20.7	22.9	23.3
Psychology	5.9	6.3	7.0	7.0	7.6	8.2	8.8	8.5	8.2
Social sciences	12.1	11.8	12.8	13.1	13.8	15.3	14.7	16.3	14.9
Engineering	5.9	5.6	5.9	6.2	6.8	8.3	8.0	8.8	9.6

Table SURD-1

S&E doctorate holders employed in academia, by type of position and degree field: 2003–21

(Thousands)

Type of position and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
Full-time junior faculty^a									
All fields	48.6	53.7	51.6	54.1	56.4	59.5	61.0	64.8	63.6
Physical sciences	6.4	6.7	6.6	6.9	7.3	7.9	7.2	7.9	6.8
Mathematics and statistics	2.8	3.3	3.2	3.6	3.8	3.7	3.6	3.8	4.2
Computer and information sciences	1.3	1.7	1.9	1.5	1.5	1.9	2.1	2.8	3.1
Life sciences	18.3	19.1	18.7	19.5	20.8	21.1	21.9	22.9	22.4
Psychology	5.7	7.1	6.1	6.4	6.1	6.8	6.8	7.2	6.9
Social sciences	8.9	9.9	10.1	10.4	10.5	10.7	11.8	11.4	10.9
Engineering	5.1	5.9	5.1	5.7	6.5	7.4	7.7	8.8	9.3
Other full-time positions^b									
All fields	39.9	40.6	43.9	48.2	55.8	62.6	64.2	65.7	65.8
Physical sciences	8.4	7.2	7.4	7.9	8.8	11.1	11.1	11.0	10.5
Mathematics and statistics	1.4	1.3	1.7	1.8	2.1	2.5	2.2	2.2	2.5
Computer and information sciences	0.6	0.6	0.9	1.0	1.5	1.4	1.3	1.6	1.6
Life sciences	14.2	15.5	16.2	18.4	22.2	25.0	26.6	26.4	27.1
Psychology	6.3	6.5	6.8	7.1	6.9	7.9	7.4	7.8	7.0
Social sciences	5.0	6.1	6.2	6.9	7.7	8.3	8.0	9.2	9.7
Engineering	3.9	3.3	4.7	5.1	6.3	6.5	7.6	7.6	7.3
Postdoctorates									
All fields	15.7	23.3	17.8	22.8	20.2	19.2	18.4	18.6	19.7
Physical sciences	2.6	3.9	3.3	4.6	4.0	3.3	3.4	3.6	4.1
Mathematics and statistics	0.5	1.0	0.5	0.7	0.4	0.5	0.5	0.7	0.6
Computer and information sciences	0.1	0.1	0.2	0.3	0.2	0.3	0.1	0.2	0.2
Life sciences	10.0	12.8	10.3	12.2	11.9	11.7	10.5	10.5	10.4
Psychology	0.9	1.7	1.0	1.1	1.0	0.8	0.7	0.8	0.7
Social sciences	0.5	0.9	0.3	0.8	0.4	0.4	0.5	0.5	0.8
Engineering	1.1	3.0	2.1	3.1	2.4	2.2	2.6	2.3	2.9
Part-time positions^c									
All fields	13.3	15.7	15.6	17.0	18.5	19.8	20.5	19.3	18.3
Physical sciences	1.1	1.5	1.6	2.0	2.5	2.8	2.6	2.2	2.1
Mathematics and statistics	0.9	1.2	1.0	1.1	1.1	1.2	1.5	1.4	1.2
Computer and information sciences	0.2	0.1	0.1	0.3	0.3	0.3	0.3	0.4	0.4
Life sciences	4.0	4.4	4.3	4.6	5.2	5.2	5.7	5.7	5.3
Psychology	3.2	3.6	3.7	3.8	4.2	4.1	3.6	3.2	3.4
Social sciences	3.1	3.7	4.0	4.0	4.2	4.4	5.4	4.6	4.5
Engineering	0.8	1.1	0.9	1.2	1.1	1.8	1.6	1.7	1.3

^a Full-time junior faculty include assistant professors.

^b Other full-time positions include those such as research associates, adjunct positions, lecturers, administrative positions, and instructors.

^c Part-time positions exclude those employed part time because they are students or retired.

Note(s):

Academic employment is limited to U.S. doctorate holders employed at 2- or 4-year colleges or universities, medical schools, and university research institutes. Degree fields use the traditional field of study aggregations from 2003 to 2015; from 2017, fine degree fields are aggregated at broad levels of the National Center for Science and Engineering Statistics Taxonomy of Disciplines. Physical sciences include earth, atmospheric, and ocean sciences; life sciences include biological, agricultural, and environmental life and health sciences. Detail may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients.

Science and Engineering Indicators

Table SURD-2

S&E doctorate holders employed in academia, by research priority, type of position, and degree field: 2003–21

(Thousands)

Research priority, type of position, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
All positions	259.5	272.8	276.5	294.8	309.0	329.3	326.6	350.4	347.2
Physical sciences	39.9	39.6	39.9	43.7	44.9	48.4	46.9	50.5	48.1
Mathematics and statistics	16.7	17.4	18.0	18.7	19.0	20.9	20.6	21.7	20.8
Computer and information sciences	5.2	5.8	6.9	7.3	8.4	9.1	8.9	10.9	11.8
Life sciences	90.0	95.5	94.2	102.0	109.8	112.7	112.6	118.8	119.6
Psychology	31.8	35.0	34.5	35.4	36.3	38.7	38.0	39.9	38.8
Social sciences	48.1	50.0	52.5	54.9	55.9	59.7	59.9	64.4	61.4
Engineering	27.8	29.6	30.4	32.8	34.7	39.7	39.8	44.1	46.8
Full-time faculty	190.6	193.1	199.1	206.9	214.4	227.7	223.4	246.8	243.4
Physical sciences	27.7	26.9	27.5	29.3	29.5	31.1	29.7	33.5	31.3
Mathematics and statistics	14.0	14.0	14.8	15.1	15.5	16.8	16.3	17.3	16.5
Computer and information sciences	4.2	4.9	5.6	5.7	6.4	7.1	7.1	8.7	9.6
Life sciences	61.7	62.8	63.5	66.7	70.5	70.8	70.0	76.6	76.7
Psychology	21.5	23.2	23.0	23.4	24.1	26.0	26.3	28.0	27.7
Social sciences	39.6	39.2	42.0	43.2	43.6	46.7	46.0	50.1	46.4
Engineering	21.9	22.1	22.7	23.4	25.0	29.2	28.2	32.6	35.3
Research as primary or secondary activity									
All positions	179.3	183.7	187.1	198.2	201.7	220.8	217.3	233.6	236.1
Physical sciences	28.2	26.9	26.8	28.9	29.5	32.8	30.7	33.3	32.4
Mathematics and statistics	10.7	11.4	11.7	12.3	11.8	13.4	13.4	14.6	13.8
Computer and information sciences	3.9	4.1	4.8	5.1	5.7	6.4	6.2	7.4	8.1
Life sciences	65.6	66.7	66.4	71.4	74.2	78.3	76.9	81.8	82.7
Psychology	19.1	20.5	21.3	21.2	20.2	21.1	22.0	23.0	23.1
Social sciences	31.5	32.7	33.8	35.2	34.7	38.2	38.2	40.8	40.9
Engineering	20.3	21.4	22.3	24.1	25.6	30.5	30.0	32.8	35.3
Full-time faculty	135.2	133.7	138.6	142.6	144.4	159.6	156.3	172.7	172.7
Physical sciences	19.9	18.2	18.7	19.6	19.7	21.9	20.6	23.1	22.0
Mathematics and statistics	9.2	9.6	10.1	10.4	10.0	11.4	11.5	12.1	11.3
Computer and information sciences	3.3	3.6	4.1	4.1	4.5	5.3	5.2	6.1	6.8
Life sciences	45.1	44.3	44.5	46.1	47.8	49.9	48.3	53.8	54.2
Psychology	14.4	14.9	15.9	16.1	15.3	16.4	17.2	18.2	18.2
Social sciences	27.0	27.2	29.0	29.6	28.9	31.9	32.2	34.5	33.3
Engineering	16.2	15.8	16.4	16.9	18.1	22.9	21.5	24.9	26.9
Research as primary activity									
All positions	102.9	108.2	107.9	117.5	120.7	133.7	130.1	138.4	136.8
Physical sciences	16.2	16.3	15.7	17.5	18.2	20.8	19.4	19.7	19.2

Table SURD-2

S&E doctorate holders employed in academia, by research priority, type of position, and degree field: 2003–21

(Thousands)

Research priority, type of position, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
Mathematics and statistics	3.8	5.0	5.6	5.7	5.6	6.4	6.1	7.0	7.0
Computer and information sciences	1.9	2.0	2.6	2.8	3.1	3.9	3.7	3.9	4.5
Life sciences	46.4	47.0	45.3	49.7	51.0	54.4	53.2	54.7	54.4
Psychology	10.0	11.2	11.1	11.4	10.9	11.3	11.2	12.8	11.6
Social sciences	13.0	13.6	14.0	15.6	15.9	17.3	16.6	19.3	17.7
Engineering	11.6	13.1	13.6	15.0	16.0	19.6	20.1	20.9	22.5
Full-time faculty	70.4	70.2	71.7	75.0	77.4	88.7	84.5	94.6	91.9
Physical sciences	9.7	9.3	9.4	9.8	10.4	12.1	11.5	11.9	11.0
Mathematics and statistics	3.4	3.9	4.6	4.6	4.5	5.4	5.1	5.7	5.5
Computer and information sciences	1.6	1.7	2.1	2.1	2.4	3.1	2.9	3.2	3.7
Life sciences	29.4	27.8	27.1	28.2	29.1	31.0	29.2	32.4	31.9
Psychology	7.0	7.8	7.8	8.0	7.9	8.6	8.6	9.9	9.1
Social sciences	10.7	11.3	11.8	12.9	13.0	14.7	14.0	16.4	14.3
Engineering	8.6	8.5	8.9	9.4	10.1	13.8	13.4	15.1	16.4
Teaching as primary activity									
All positions	105.9	109.4	114.0	120.6	124.8	133.7	132.8	140.3	141.1
Physical sciences	17.0	16.9	17.5	18.8	18.7	19.7	19.6	21.4	20.5
Mathematics and statistics	9.4	9.9	10.3	10.7	11.3	12.2	12.1	12.7	11.7
Computer and information sciences	2.5	3.0	3.2	3.8	4.0	3.6	3.7	4.9	5.2
Life sciences	25.2	27.6	28.2	30.6	33.9	35.0	34.7	36.5	37.9
Psychology	13.3	14.3	14.4	15.0	14.9	16.3	17.0	15.5	16.3
Social sciences	27.3	27.5	29.6	29.8	30.0	33.4	33.4	33.9	33.3
Engineering	11.2	10.2	10.8	11.9	11.9	13.5	12.5	15.5	16.3
Full-time faculty	89.9	88.4	93.5	96.7	98.2	101.9	100.3	109.2	110.0
Physical sciences	14.3	13.8	14.2	15.1	14.5	14.6	13.8	16.0	15.5
Mathematics and statistics	8.5	8.2	8.6	8.8	9.3	9.5	9.2	10.2	9.4
Computer and information sciences	2.2	2.5	2.8	3.2	3.4	3.0	3.0	4.1	4.3
Life sciences	21.0	21.8	23.1	24.4	26.1	26.3	26.3	27.9	28.6
Psychology	10.8	11.1	11.1	11.3	11.0	11.8	12.4	11.9	12.7
Social sciences	23.1	21.9	24.3	23.9	23.8	25.7	25.5	26.6	25.8
Engineering	9.9	8.9	9.4	10.0	10.1	11.1	10.2	12.6	13.7
Other primary activity									
All positions	49.5	55.2	54.6	56.6	63.5	61.9	63.6	71.7	69.4
Physical sciences	7.2	6.5	6.7	7.4	8.0	7.9	8.0	9.5	8.4
Mathematics and statistics	2.2	2.5	2.1	2.3	2.1	2.3	2.5	2.0	2.2
Computer and information sciences	0.8	0.8	1.1	0.8	1.4	1.5	1.6	2.1	2.1

Table SURD-2

S&E doctorate holders employed in academia, by research priority, type of position, and degree field: 2003–21

(Thousands)

Research priority, type of position, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
Life sciences	17.6	20.9	20.8	21.6	24.9	23.3	24.7	27.7	27.3
Psychology	8.1	9.5	9.0	9.1	10.4	11.1	9.8	11.6	11.0
Social sciences	8.2	8.8	8.9	9.5	9.9	9.1	9.9	11.2	10.5
Engineering	5.5	6.2	5.9	6.0	6.8	6.7	7.2	7.6	8.1
Full-time faculty	30.3	34.6	33.9	35.1	38.8	37.1	38.6	43.1	41.6
Physical sciences	3.6	3.8	3.9	4.4	4.6	4.4	4.5	5.6	4.9
Mathematics and statistics	1.9	1.9	1.6	1.7	1.6	1.9	2.0	1.4	1.6
Computer and information sciences	0.3	0.5	0.7	0.4	0.6	1.1	1.2	1.5	1.6
Life sciences	11.3	13.2	13.3	14.0	15.3	13.5	14.5	16.3	16.2
Psychology	3.7	4.4	4.1	4.1	5.1	5.6	5.4	6.2	5.9
Social sciences	5.8	6.0	5.9	6.5	6.8	6.3	6.6	7.1	6.3
Engineering	3.5	4.7	4.4	3.9	4.7	4.3	4.7	5.0	5.3

Note(s):

Detail may not add to total because of rounding. Academic employment is limited to U.S. doctorate holders employed at 2- or 4-year colleges or universities, medical schools, and university research institutes, excluding those employed part time because they are students or retired. Full-time faculty include full professors, associate professors, and assistant professors. Research includes basic or applied research, development, or design. Degree fields use the traditional field of study aggregations from 2003 to 2015; from 2017, fine degree fields are aggregated at broad levels of the National Center for Science and Engineering Statistics Taxonomy of Disciplines. Physical sciences include earth, atmospheric, and ocean sciences; life sciences include biological, agricultural, and environmental life and health sciences.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients.

Science and Engineering Indicators

Table SURD-3

S&E doctorate holders employed in academia with federal support, by degree field, research activity, and type of position: 2021

(Percent)

Degree field, research activity, and type of position	2021
All fields	39.7
Research as primary or secondary activity	49.4
Full-time faculty	39.8
Other full-time positions	36.7
Postdoctorates	67.3
Physical sciences	48.7
Research as primary or secondary activity	60.7
Full-time faculty	49.7
Other full-time positions	44.8
Postdoctorates	66.3
Mathematics and statistics	22.9
Research as primary or secondary activity	30.8
Full-time faculty	23.0
Other full-time positions	18.8
Postdoctorates	50.1
Computer and information sciences	43.1
Research as primary or secondary activity	55.4
Full-time faculty	44.1
Other full-time positions	34.0
Postdoctorates	78.7
Life sciences	50.1
Research as primary or secondary activity	61.6
Full-time faculty	51.3
Other full-time positions	43.2
Postdoctorates	72.3
Psychology	28.4
Research as primary or secondary activity	39.6
Full-time faculty	30.7
Other full-time positions	19.1
Postdoctorates	73.0
Social sciences	17.4
Research as primary or secondary activity	20.5
Full-time faculty	17.7
Other full-time positions	17.3
Postdoctorates	28.2
Engineering	49.1

Table SURD-3

S&E doctorate holders employed in academia with federal support, by degree field, research activity, and type of position: 2021

(Percent)

Degree field, research activity, and type of position	2021
Research as primary or secondary activity	56.4
Full-time faculty	48.6
Other full-time positions	50.6
Postdoctorates	63.1

Note(s):

Academic employment is limited to U.S. doctorate holders employed at 2- or 4-year colleges or universities, medical schools, or university research institutes. Full-time faculty include full professors, associate professors, and assistant professors. Total includes part-time employment not shown separately but excludes those employed part time because they are students or retired. Research includes basic or applied research, development, or design. Physical sciences include earth, atmospheric, and ocean sciences; life sciences include biological, agricultural, and environmental life and health sciences.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients.

Science and Engineering Indicators

Table SURD-4

S&E doctorate holders employed in academia, by type of position, sex, and degree field: 2003–21

(Thousands)

Type of position, sex, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
All positions									
Both sexes, all fields	259.5	272.8	276.5	294.8	309.0	329.3	326.6	350.4	347.2
Physical sciences	39.9	39.6	39.9	43.7	44.9	48.4	46.3	49.8	48.1
Mathematics and statistics	16.7	17.4	18.0	18.7	19.0	20.9	19.6	20.6	20.8
Computer and information sciences	5.2	5.8	6.9	7.3	8.4	9.1	8.8	10.7	11.8
Life sciences	90.0	95.5	94.2	102.0	109.8	112.7	113.1	119.8	119.6
Psychology	31.8	35.0	34.5	35.4	36.3	38.7	37.9	39.7	38.8
Social sciences	48.1	50.0	52.5	54.9	55.9	59.7	60.4	64.8	61.3
Engineering	27.8	29.6	30.4	32.8	34.7	39.7	40.5	45.0	46.8
Male, all fields	180.7	182.7	182.3	189.6	195.0	206.0	201.1	213.1	206.4
Physical sciences	33.7	32.3	32.1	34.4	34.5	36.9	34.8	36.8	34.4
Mathematics and statistics	13.8	14.1	14.1	14.4	14.6	15.7	14.7	15.2	15.6
Computer and information sciences	4.3	4.5	5.5	5.8	6.7	7.2	6.8	8.3	8.9
Life sciences	56.6	57.9	55.5	58.7	61.8	60.7	60.5	63.0	61.6
Psychology	15.6	16.0	15.6	15.6	15.2	16.4	15.9	15.8	15.0
Social sciences	32.0	31.9	33.1	33.4	33.3	36.4	35.6	37.6	34.6
Engineering	24.8	26.0	26.3	27.3	28.9	32.8	32.8	36.3	36.3
Female, all fields	78.7	90.1	94.2	105.2	114.0	123.3	125.4	137.3	140.8
Physical sciences	6.1	7.3	7.8	9.3	10.4	11.5	11.5	13.0	13.6
Mathematics and statistics	2.9	3.3	3.9	4.3	4.5	5.2	4.9	5.3	5.2
Computer and information sciences	1.0	1.2	1.4	1.5	1.8	1.9	2.0	2.4	2.9
Life sciences	33.4	37.6	38.7	43.3	48.0	52.0	52.6	56.7	58.0
Psychology	16.2	19.0	18.9	19.8	21.1	22.3	22.0	23.9	23.8
Social sciences	16.2	18.2	19.5	21.5	22.6	23.4	24.8	27.2	26.8
Engineering	3.0	3.6	4.1	5.5	5.7	7.0	7.6	8.7	10.5
Full-time senior faculty^a									
Both sexes, all fields	142.0	139.4	147.5	152.8	158.0	168.2	162.4	182.0	179.8
Physical sciences	21.3	20.2	20.9	22.4	22.2	23.2	22.1	25.1	24.5
Mathematics and statistics	11.2	10.7	11.6	11.5	11.7	13.1	11.8	12.5	12.2
Computer and information sciences	2.9	3.2	3.8	4.2	4.9	5.3	5.0	5.8	6.5
Life sciences	43.4	43.7	44.8	47.2	49.8	49.7	48.4	54.2	54.3
Psychology	15.8	16.1	17.0	17.0	18.0	19.1	19.5	20.7	20.8
Social sciences	30.7	29.3	32.0	32.8	33.0	35.9	34.6	39.0	35.5
Engineering	16.8	16.2	17.6	17.7	18.5	21.8	21.0	24.6	26.0
Male, all fields	109.7	104.6	108.1	109.9	111.4	116.1	109.7	122.2	116.6
Physical sciences	18.9	17.6	17.9	18.9	18.2	18.6	17.6	19.6	18.7

Table SURD-4

S&E doctorate holders employed in academia, by type of position, sex, and degree field: 2003–21

(Thousands)

Type of position, sex, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
Mathematics and statistics	9.9	9.2	9.6	9.4	9.9	10.4	9.4	9.8	9.5
Computer and information sciences	2.4	2.6	3.1	3.5	3.9	4.3	4.0	4.7	5.1
Life sciences	30.9	30.4	30.2	31.0	32.2	30.4	29.4	32.6	31.4
Psychology	9.5	9.1	9.3	9.3	9.2	9.9	9.7	9.8	9.5
Social sciences	22.4	20.7	21.7	21.9	21.5	23.8	21.8	24.7	21.3
Engineering	15.7	15.0	16.3	16.0	16.5	18.8	17.9	21.0	21.1
Female, all fields	32.3	34.8	39.4	42.8	46.6	52.0	52.7	59.8	63.2
Physical sciences	2.4	2.7	3.1	3.6	4.0	4.6	4.5	5.4	5.8
Mathematics and statistics	1.3	1.4	1.9	2.1	1.8	2.7	2.4	2.8	2.7
Computer and information sciences	0.5	0.6	0.6	0.7	0.9	1.0	1.0	1.1	1.5
Life sciences	12.5	13.3	14.6	16.2	17.5	19.3	19.0	21.6	22.9
Psychology	6.3	7.0	7.7	7.6	8.7	9.2	9.8	10.9	11.3
Social sciences	8.3	8.7	10.2	10.9	11.6	12.2	12.8	14.3	14.1
Engineering	1.1	1.2	1.3	1.7	2.0	3.0	3.1	3.7	4.8
Full-time junior faculty ^b									
Both sexes, all fields	48.6	53.7	51.6	54.1	56.4	59.5	61.0	64.8	63.6
Physical sciences	6.4	6.7	6.6	6.9	7.3	7.9	7.2	7.9	6.8
Mathematics and statistics	2.8	3.3	3.2	3.6	3.8	3.7	3.6	3.8	4.2
Computer and information sciences	1.3	1.7	1.9	1.5	1.5	1.9	2.1	2.8	3.1
Life sciences	18.3	19.1	18.7	19.5	20.8	21.1	21.9	22.9	22.4
Psychology	5.7	7.1	6.1	6.4	6.1	6.8	6.8	7.2	6.9
Social sciences	8.9	9.9	10.1	10.4	10.5	10.7	11.8	11.4	10.9
Engineering	5.1	5.9	5.1	5.7	6.5	7.4	7.7	8.8	9.3
Male, all fields	29.2	31.1	30.1	30.1	31.1	34.2	34.9	35.9	34.6
Physical sciences	4.9	4.9	4.8	4.9	5.3	5.6	5.0	5.6	4.5
Mathematics and statistics	2.0	2.3	2.3	2.5	2.4	2.3	2.5	2.6	3.1
Computer and information sciences	1.0	1.2	1.4	1.1	1.1	1.4	1.6	2.1	2.3
Life sciences	10.3	10.4	9.8	9.7	10.2	10.6	10.9	10.7	10.4
Psychology	2.3	2.6	2.4	2.2	2.0	2.5	2.4	2.3	1.8
Social sciences	4.5	5.0	5.6	5.7	5.4	5.9	6.4	5.8	5.6
Engineering	4.3	4.6	3.8	3.9	4.8	5.8	6.1	6.8	6.9
Female, all fields	19.3	22.6	21.5	23.9	25.3	25.3	26.1	28.9	29.0
Physical sciences	1.5	1.8	1.8	2.0	2.1	2.3	2.1	2.3	2.3
Mathematics and statistics	0.8	1.0	1.0	1.1	1.4	1.3	1.1	1.2	1.1
Computer and information sciences	0.3	0.4	0.5	0.4	0.3	0.5	0.5	0.7	0.8
Life sciences	8.0	8.7	8.9	9.8	10.6	10.5	11.1	12.2	12.0

Table SURD-4

S&E doctorate holders employed in academia, by type of position, sex, and degree field: 2003–21

(Thousands)

Type of position, sex, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
Psychology	3.4	4.5	3.7	4.2	4.1	4.4	4.4	4.9	5.0
Social sciences	4.4	4.9	4.4	4.7	5.2	4.8	5.3	5.6	5.3
Engineering	0.8	1.3	1.3	1.8	1.6	1.6	1.6	2.0	2.3
Other full-time positions ^c									
Both sexes, all fields	39.9	40.6	43.9	48.2	55.8	62.6	64.2	65.7	65.8
Physical sciences	8.4	7.2	7.4	7.9	8.8	11.2	11.1	11.0	10.5
Mathematics and statistics	1.4	1.3	1.7	1.8	2.1	2.4	2.2	2.2	2.5
Computer and information sciences	0.7	0.6	0.9	1.0	1.5	1.3	1.3	1.6	1.6
Life sciences	14.2	15.5	16.2	18.4	22.2	25.0	26.6	26.4	27.1
Psychology	6.3	6.5	6.8	7.1	6.9	7.9	7.4	7.8	7.0
Social sciences	5.0	6.1	6.2	6.9	7.7	8.3	8.0	9.2	9.7
Engineering	3.9	3.3	4.7	5.1	6.3	6.5	7.6	7.6	7.3
Male, all fields	26.0	25.6	26.2	28.1	32.3	35.2	35.9	35.5	35.2
Physical sciences	7.1	5.9	5.6	5.9	6.5	8.5	8.0	7.9	7.2
Mathematics and statistics	1.0	0.9	1.2	1.1	1.3	1.8	1.6	1.3	1.8
Computer and information sciences	0.6	0.6	0.7	0.9	1.1	1.0	0.9	1.0	1.1
Life sciences	8.3	9.0	8.6	9.5	11.1	12.3	13.0	12.6	12.7
Psychology	2.6	2.8	2.6	2.7	2.5	2.4	2.6	2.4	2.3
Social sciences	3.1	3.5	3.3	3.7	4.3	4.1	4.0	4.6	4.9
Engineering	3.3	2.8	3.9	4.3	5.2	5.2	5.8	5.7	5.1
Female, all fields	13.9	15.0	17.7	20.1	23.5	27.5	28.3	30.2	30.5
Physical sciences	1.3	1.4	1.6	2.0	2.3	2.6	3.1	3.2	3.3
Mathematics and statistics	0.3	0.3	0.5	0.7	0.7	0.7	0.7	0.9	0.7
Computer and information sciences	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.5	0.5
Life sciences	5.9	6.5	7.6	8.9	11.0	12.9	13.6	13.9	14.4
Psychology	3.5	3.7	4.2	4.4	4.4	5.4	4.8	5.3	4.7
Social sciences	1.9	2.6	2.9	3.2	3.3	4.2	4.0	4.6	4.8
Engineering	0.6	0.5	0.8	0.7	0.9	1.5	1.8	1.9	2.2
Postdoctorates									
Both sexes, all fields	15.7	23.3	17.8	22.8	20.2	19.2	18.4	18.6	19.7
Physical sciences	2.6	3.9	3.3	4.6	4.0	3.3	3.4	3.6	4.1
Mathematics and statistics	0.5	1.0	0.5	0.7	0.4	0.5	0.5	0.7	0.6
Computer and information sciences	0.1	0.1	0.2	0.3	0.2	0.3	0.1	0.2	0.2
Life sciences	10.0	12.8	10.3	12.2	11.9	11.7	10.5	10.5	10.4
Psychology	0.9	1.7	1.0	1.1	1.0	0.8	0.7	0.8	0.7
Social sciences	0.5	0.9	0.3	0.8	0.4	0.4	0.5	0.5	0.8

Table SURD-4

S&E doctorate holders employed in academia, by type of position, sex, and degree field: 2003–21

(Thousands)

Type of position, sex, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
Engineering	1.1	3.0	2.1	3.1	2.4	2.2	2.6	2.3	2.9
Male, all fields	9.8	13.8	10.8	13.8	12.0	11.0	10.8	10.7	11.5
Physical sciences	2.1	2.9	2.5	3.4	2.8	2.3	2.5	2.5	2.8
Mathematics and statistics	0.3	0.8	0.4	0.6	0.3	0.4	0.5	0.6	0.4
Computer and information sciences	0.1	0.1	0.2	0.2	0.2	0.3	s	0.2	0.2
Life sciences	5.7	6.7	5.5	6.6	6.6	5.8	5.6	5.3	5.2
Psychology	0.4	0.5	0.4	0.4	0.2	0.3	0.2	0.3	0.3
Social sciences	0.3	0.4	0.1	0.4	0.2	0.2	0.2	0.1	0.3
Engineering	0.9	2.4	1.7	2.2	1.8	1.7	1.8	1.7	2.2
Female, all fields	6.0	9.5	7.0	8.9	8.2	8.2	7.5	7.8	8.3
Physical sciences	0.5	1.0	0.8	1.2	1.2	1.0	0.9	1.0	1.3
Mathematics and statistics	0.2	0.2	0.1	0.1	0.1	0.1	s	0.1	0.2
Computer and information sciences	0.0	0.0	s	0.1	s	0.1	s	s	s
Life sciences	4.3	6.1	4.8	5.6	5.2	5.8	5.0	5.2	5.1
Psychology	0.5	1.1	0.6	0.7	0.8	0.5	0.4	0.5	0.4
Social sciences	0.2	0.5	0.2	0.5	0.2	0.2	0.4	0.4	0.5
Engineering	0.2	0.6	0.4	0.8	0.6	0.5	0.7	0.6	0.8
Part-time positions ^d									
Both sexes, all fields	13.3	15.7	15.6	17.0	18.5	19.8	20.5	19.3	18.3
Physical sciences	1.1	1.5	1.6	2.0	2.5	2.8	2.6	2.2	2.1
Mathematics and statistics	0.9	1.2	1.0	1.1	1.1	1.2	1.5	1.4	1.2
Computer and information sciences	0.2	0.1	0.1	0.3	0.3	0.3	0.3	0.4	0.4
Life sciences	4.0	4.4	4.3	4.6	5.2	5.2	5.7	5.7	5.3
Psychology	3.2	3.6	3.7	3.8	4.2	4.1	3.6	3.2	3.4
Social sciences	3.1	3.7	4.0	4.0	4.2	4.4	5.4	4.6	4.5
Engineering	0.8	1.1	0.9	1.2	1.1	1.8	1.6	1.7	1.3
Male, all fields	6.1	7.6	7.0	7.6	8.0	9.5	9.7	8.8	8.4
Physical sciences	0.7	1.1	1.1	1.3	1.7	1.9	1.7	1.1	1.2
Mathematics and statistics	0.6	0.9	0.6	0.7	0.7	0.8	0.8	1.0	0.8
Computer and information sciences	0.2	0.1	s	0.2	s	0.2	0.2	0.2	0.3
Life sciences	1.3	1.5	1.4	1.8	1.6	1.6	1.6	1.9	1.8
Psychology	0.8	0.9	1.0	1.0	1.2	1.3	1.1	0.9	1.1
Social sciences	1.7	2.2	2.3	1.8	2.0	2.4	3.1	2.4	2.4
Engineering	0.7	1.0	0.6	0.8	0.6	1.3	1.2	1.2	0.9
Female, all fields	7.3	8.1	8.6	9.4	10.5	10.3	10.8	10.5	9.9
Physical sciences	0.4	0.5	0.5	0.7	0.8	1.0	0.8	1.1	0.9

Table SURD-4

S&E doctorate holders employed in academia, by type of position, sex, and degree field: 2003–21

(Thousands)

Type of position, sex, and degree field	2003	2006	2008	2010	2013	2015	2017	2019	2021
Mathematics and statistics	0.2	0.3	0.4	0.4	0.4	0.4	0.7	0.4	0.4
Computer and information sciences	0.1	0.0	s	0.1	0.1	0.1	0.1	0.2	0.1
Life sciences	2.7	3.0	2.9	2.9	3.6	3.5	4.0	3.8	3.6
Psychology	2.4	2.8	2.7	2.8	3.0	2.8	2.5	2.3	2.4
Social sciences	1.4	1.5	1.7	2.2	2.2	2.0	2.3	2.3	2.1
Engineering	0.1	0.1	0.3	0.3	0.5	0.4	0.4	0.5	0.4

s = suppressed for reasons of confidentiality and/or reliability.

^a Full-time senior faculty include full professors and associate professors.

^b Full-time junior faculty include assistant professors.

^c Other full-time positions include those such as research associates, adjunct positions, lecturers, administrative positions, and instructors.

^d Part-time positions exclude those employed part time because they are students or retired.

Note(s):

Detail may not add to total because of rounding. Academic employment is limited to U.S. doctorate holders employed at 2- or 4-year colleges or universities, medical schools, and university research institutes. Degree fields use the traditional field of study aggregations from 1973 to 2015; from 2017, fine degree fields are aggregated at broad levels of the National Center for Science and Engineering Statistics Taxonomy of Disciplines. Physical sciences include earth, atmospheric, and ocean sciences; life sciences include biological, agricultural, and environmental life and health sciences.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients.

Science and Engineering Indicators

Table SURD-5

S&E doctorate holders employed in academia, by type of position, race or ethnicity, and degree field: 2006–21

(Thousands)

Type of position, race or ethnicity, and degree field	2006	2008	2010	2013	2015	2017	2019	2021
All positions								
All races or ethnicities, all fields	272.8	276.5	294.8	309.0	329.3	326.6	350.4	347.2
Physical sciences	39.6	39.9	43.7	44.9	48.4	46.3	49.8	48.1
Mathematics and statistics	17.3	18.0	18.7	19.0	20.9	19.6	20.6	20.8
Computer and information sciences	5.8	6.9	7.3	8.4	9.1	8.8	10.7	11.8
Life sciences	95.5	94.2	102.0	109.8	112.7	113.1	119.8	119.6
Psychology	35.0	34.5	35.4	36.3	38.7	37.9	39.7	38.8
Social sciences	50.1	52.5	54.9	55.9	59.7	60.4	64.8	61.3
Engineering	29.6	30.4	32.8	34.7	39.7	40.5	45.0	46.8
White, all fields	212.2	211.8	219.7	225.8	237.0	229.9	243.5	236.9
Physical sciences	31.4	31.5	33.5	33.8	35.6	33.3	36.2	33.2
Mathematics and statistics	13.1	13.6	13.7	13.6	15.1	13.7	13.8	13.9
Computer and information sciences	3.7	4.0	4.1	4.8	5.4	5.3	6.2	6.5
Life sciences	74.2	72.5	76.9	81.1	81.6	80.3	83.6	82.4
Psychology	29.5	28.7	28.6	28.9	30.6	29.2	30.9	30.0
Social sciences	40.7	41.7	43.0	42.6	45.8	44.8	47.8	45.0
Engineering	19.5	19.7	20.0	21.1	22.9	23.3	25.1	26.0
Asian or Pacific Islander, all fields	37.4	39.7	46.9	52.1	59.0	61.6	70.0	71.6
Physical sciences	5.6	5.7	7.0	7.6	9.3	9.2	9.9	10.9
Mathematics and statistics	3.0	3.2	3.7	4.0	4.4	4.4	5.1	5.0
Computer and information sciences	1.7	2.5	2.7	3.0	3.0	2.8	3.8	4.3
Life sciences	14.0	13.9	16.2	18.4	20.6	21.6	24.0	24.5
Psychology	1.4	1.6	2.0	2.2	2.8	3.3	3.4	3.0
Social sciences	3.9	4.5	5.2	6.1	6.1	6.8	7.6	7.7
Engineering	7.8	8.2	10.1	10.7	12.9	13.6	16.1	16.2
Underrepresented minority, all fields ^a	20.4	21.8	24.4	27.2	29.4	30.4	32.4	33.0
Physical sciences	2.2	2.3	2.7	3.0	2.9	3.2	3.3	3.2
Mathematics and statistics	1.0	1.1	1.2	1.4	1.4	1.4	1.5	1.7
Computer and information sciences	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.8
Life sciences	6.4	6.6	7.6	8.7	9.4	9.8	10.5	10.7
Psychology	3.6	3.7	4.3	4.5	4.6	4.6	4.7	4.9
Social sciences	4.9	5.6	5.8	6.5	7.0	7.6	8.4	7.7
Engineering	2.0	2.1	2.4	2.6	3.6	3.3	3.5	3.9
Full-time faculty^b								
All races or ethnicities, all fields	193.1	199.1	206.9	214.4	227.7	223.4	246.8	243.4
Physical sciences	26.9	27.5	29.3	29.5	31.1	29.3	33.0	31.3

Table SURD-5

S&E doctorate holders employed in academia, by type of position, race or ethnicity, and degree field: 2006–21

(Thousands)

Type of position, race or ethnicity, and degree field	2006	2008	2010	2013	2015	2017	2019	2021
Mathematics and statistics	14.0	14.8	15.1	15.5	16.8	15.4	16.3	16.4
Computer and information sciences	4.9	5.6	5.7	6.4	7.1	7.0	8.6	9.6
Life sciences	62.8	63.5	66.7	70.6	70.8	70.3	77.1	76.7
Psychology	23.2	23.0	23.4	24.1	26.0	26.3	27.9	27.7
Social sciences	39.2	42.0	43.2	43.5	46.7	46.4	50.4	46.4
Engineering	22.1	22.7	23.4	25.0	29.2	28.7	33.4	35.3
White, all fields	155.3	156.5	158.7	161.5	168.9	162.9	177.5	170.5
Physical sciences	22.6	22.4	23.4	23.1	24.2	22.3	25.3	23.0
Mathematics and statistics	10.8	11.3	11.4	11.3	12.2	11.0	11.1	11.1
Computer and information sciences	2.9	3.2	3.2	3.5	4.3	4.3	5.1	5.0
Life sciences	51.5	51.0	52.6	54.7	54.5	53.4	57.2	55.2
Psychology	19.9	19.5	19.2	19.7	20.8	20.5	22.2	21.9
Social sciences	32.3	33.5	33.8	33.4	36.2	34.6	37.6	34.1
Engineering	15.3	15.4	15.0	15.8	16.7	16.8	19.0	20.1
Asian or Pacific Islander, all fields	21.8	25.0	28.5	32.4	36.8	37.6	44.8	46.9
Physical sciences	2.7	3.1	3.8	4.1	4.6	4.5	5.3	5.9
Mathematics and statistics	2.3	2.5	2.6	2.9	3.5	3.3	3.9	4.1
Computer and information sciences	1.5	2.0	2.2	2.3	2.4	2.3	3.0	3.8
Life sciences	6.5	7.3	8.4	9.6	10.0	10.4	12.6	13.5
Psychology	0.8	1.0	1.2	1.4	1.9	2.3	2.2	2.0
Social sciences	2.9	3.6	4.0	4.8	4.8	5.4	6.1	5.8
Engineering	5.0	5.5	6.4	7.2	9.5	9.4	11.6	12.0
Underrepresented minority, all fields ^a	13.9	15.3	17.2	17.9	19.6	20.0	21.8	22.5
Physical sciences	1.5	1.7	2.0	2.0	1.9	2.1	2.1	2.1
Mathematics and statistics	0.8	0.9	1.0	1.0	1.0	0.9	1.1	1.1
Computer and information sciences	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.7
Life sciences	4.0	4.3	5.0	5.2	5.6	5.8	6.4	6.8
Psychology	2.1	2.2	2.5	2.6	2.8	2.9	3.1	3.2
Social sciences	3.6	4.3	4.7	4.9	5.1	5.5	6.0	5.8
Engineering	1.6	1.5	1.7	1.7	2.8	2.3	2.6	2.9
Postdoctorates								
All races or ethnicities, all fields	23.3	17.8	22.8	20.2	19.2	18.4	18.6	19.7
Physical sciences	3.9	3.3	4.6	4.0	3.3	3.4	3.6	4.1
Mathematics and statistics	1.0	0.5	0.7	0.4	0.5	0.5	0.7	0.6
Computer and information sciences	0.1	0.2	0.3	0.2	0.3	0.1	0.2	0.2
Life sciences	12.8	10.3	12.2	11.9	11.7	10.5	10.5	10.4

Table SURD-5

S&E doctorate holders employed in academia, by type of position, race or ethnicity, and degree field: 2006–21

(Thousands)

Type of position, race or ethnicity, and degree field	2006	2008	2010	2013	2015	2017	2019	2021
Psychology	1.7	1.0	1.1	1.0	0.8	0.7	0.8	0.7
Social sciences	0.9	0.3	0.8	0.4	0.4	0.5	0.5	0.8
Engineering	3.0	2.1	3.1	2.4	2.2	2.6	2.3	2.9
White, all fields	13.4	10.3	12.5	10.6	10.1	9.3	8.5	9.4
Physical sciences	2.4	1.9	2.7	2.2	1.7	1.6	1.6	1.8
Mathematics and statistics	0.6	0.4	0.3	0.2	0.3	0.3	0.3	0.3
Computer and information sciences	s	s	0.1	s	0.1	0.1	0.1	0.1
Life sciences	7.3	6.3	7.0	6.4	6.2	5.5	5.0	5.3
Psychology	1.3	0.8	0.7	0.7	0.5	0.5	0.5	0.4
Social sciences	0.6	0.2	0.6	0.2	0.2	0.3	0.3	0.5
Engineering	1.1	0.7	1.0	0.6	1.1	1.1	0.6	0.9
Asian or Pacific Islander, all fields	8.1	6.1	8.3	7.4	7.0	7.2	8.1	8.1
Physical sciences	1.3	1.2	1.7	1.4	1.3	1.6	1.7	2.0
Mathematics and statistics	0.3	0.1	0.3	0.1	0.2	0.1	0.4	0.3
Computer and information sciences	s	0.2	0.2	s	0.2	s	s	0.0
Life sciences	4.4	3.0	4.0	4.0	4.1	3.8	4.2	3.7
Psychology	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2
Social sciences	0.1	0.1	0.2	0.1	0.1	0.1	s	0.1
Engineering	1.7	1.3	1.8	1.5	1.0	1.4	1.5	1.7
Underrepresented minority, all fields ^a	1.7	1.3	1.6	2.1	1.7	1.5	1.6	1.8
Physical sciences	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Mathematics and statistics	0.1	s	s	0.1	s	s	s	s
Computer and information sciences	s	s	s	s	s	s	s	s
Life sciences	1.0	0.8	0.9	1.3	1.2	1.0	1.0	1.0
Psychology	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Social sciences	0.1	0.0	0.1	s	s	0.1	0.1	0.1
Engineering	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2
Other positions ^c								
All races or ethnicities, all fields	56.4	59.5	65.1	74.4	82.4	84.8	85.0	84.1
Physical sciences	8.8	9.1	9.8	11.4	14.0	13.6	13.3	12.7
Mathematics and statistics	2.4	2.7	2.9	3.1	3.6	3.7	3.6	3.8
Computer and information sciences	0.8	1.0	1.3	1.8	1.7	1.6	1.9	2.0
Life sciences	19.9	20.5	23.1	27.3	30.2	32.2	32.1	32.5
Psychology	10.1	10.5	10.9	11.2	11.9	11.0	11.0	10.5
Social sciences	9.9	10.2	10.9	12.0	12.6	13.5	13.8	14.2
Engineering	4.5	5.6	6.3	7.3	8.3	9.2	9.3	8.6

Table SURD-5

S&E doctorate holders employed in academia, by type of position, race or ethnicity, and degree field: 2006–21

(Thousands)

Type of position, race or ethnicity, and degree field	2006	2008	2010	2013	2015	2017	2019	2021
White, all fields	43.5	45.0	48.5	53.7	58.0	57.7	57.5	57.1
Physical sciences	6.4	7.2	7.4	8.5	9.7	9.4	9.3	8.5
Mathematics and statistics	1.8	1.9	2.0	2.1	2.6	2.3	2.4	2.6
Computer and information sciences	0.8	0.8	0.8	1.3	1.0	1.0	1.0	1.3
Life sciences	15.4	15.2	17.3	20.0	20.9	21.4	21.4	21.8
Psychology	8.3	8.4	8.7	8.5	9.3	8.3	8.1	7.7
Social sciences	7.8	8.0	8.6	9.0	9.4	9.9	9.9	10.3
Engineering	3.0	3.6	4.0	4.7	5.1	5.5	5.4	5.0
Asian or Pacific Islander, all fields	7.5	8.6	10.1	12.3	15.2	16.9	17.1	16.5
Physical sciences	1.6	1.4	1.5	2.1	3.4	3.1	2.8	2.9
Mathematics and statistics	0.5	0.7	0.8	1.0	0.7	0.9	0.8	0.6
Computer and information sciences	0.2	0.2	0.3	0.7	0.4	0.4	0.7	0.5
Life sciences	3.1	3.5	3.8	4.8	6.5	7.3	7.2	7.3
Psychology	0.4	0.5	0.6	0.6	0.8	0.9	1.0	0.9
Social sciences	0.8	0.8	1.0	1.2	1.2	1.4	1.5	1.8
Engineering	1.1	1.5	1.9	2.0	2.4	2.8	3.0	2.5
Underrepresented minority, all fields ^a	4.8	5.3	5.6	7.2	8.1	8.9	9.0	8.6
Physical sciences	0.5	0.4	0.5	0.7	0.8	0.9	0.9	0.9
Mathematics and statistics	0.1	0.2	0.2	0.3	0.4	0.4	0.3	0.5
Computer and information sciences	0.0	s	0.1	0.1	0.2	0.2	0.2	0.1
Life sciences	1.4	1.5	1.7	2.2	2.6	3.0	3.1	2.9
Psychology	1.4	1.4	1.6	1.8	1.7	1.6	1.5	1.6
Social sciences	1.2	1.3	1.0	1.6	1.9	1.9	2.2	1.8
Engineering	0.3	0.4	0.5	0.7	0.7	0.8	0.7	0.8

s = suppressed for reasons of confidentiality and/or reliability.

^a Underrepresented minority includes Blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives. Total includes individuals reporting more than one race who are not shown separately.

^b Full-time faculty include full professors, associate professors, and assistant professors.

^c Other positions include full-time positions such as research associates, adjunct positions, lecturers, administrative positions, instructors, and all kinds of part-time positions. Part-time positions exclude those employed part time because they are students or retired.

Note(s):

Academic employment is limited to U.S. doctorate holders employed at 2- or 4-year colleges or universities, medical schools, and university research institutes. Degree fields use the traditional field of study aggregations from 1973 to 2015; from 2017, fine degree fields are aggregated at broad levels of the National Center for Science and Engineering Statistics Taxonomy of Disciplines.

Physical sciences include earth, atmospheric, and ocean sciences; life sciences include biological, agricultural, and environmental life and health sciences. Detail may not add to total because of rounding.

Source(s):
National Center for Science and Engineering Statistics, Survey of Doctorate Recipients.

Science and Engineering Indicators

Table SURD-6

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by race, ethnicity, sex, and historical broad field: 2017–21

(Percent distribution and number)

Primary source of support, race, ethnicity, and sex	All S&E	Science					Engineering
		All science	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	
All recipients ^b (number)	124,948	103,947	43,810	18,463	8,674	33,000	21,001
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	14.24	15.69	13.72	4.25	9.40	26.36	7.04
Teaching assistantship	17.18	19.15	11.53	21.59	35.21	23.68	7.43
Research assistantship, traineeship, or internship	30.79	28.09	30.93	44.87	25.51	15.60	44.15
Fellowship, scholarship, or dissertation grant	26.75	26.51	33.33	21.76	18.00	22.36	27.96
Other ^c	11.05	10.57	10.50	7.54	11.89	11.99	13.42
Hispanic or Latino ^d (number)	9,808	8,323	3,492	1,212	483	3,136	1,485
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	15.27	16.54	11.94	4.54	8.90	27.49	8.15
Teaching assistantship	14.61	15.92	9.14	19.39	32.92	19.52	7.27
Research assistantship, traineeship, or internship	22.41	20.56	24.48	31.85	21.33	11.70	32.79
Fellowship, scholarship, or dissertation grant	36.28	35.70	44.87	35.48	25.47	27.14	39.53
Other ^c	11.43	11.28	9.56	8.75	11.39	14.16	12.26
Not Hispanic or Latino							
American Indian or Alaska Native (number)	339	301	121	36	8	136	38
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	22.42	23.92	27.27	D	D	26.47	D
Teaching assistantship	9.73	10.63	4.96	25.00	D	11.03	D
Research assistantship, traineeship, or internship	14.45	13.62	16.53	22.22	D	9.56	21.05
Fellowship, scholarship, or dissertation grant	34.22	33.22	33.88	33.33	D	33.82	42.11
Other ^c	19.17	18.60	17.36	D	D	19.12	23.68
Asian (number)	13,625	10,204	4,923	1,670	1,275	2,336	3,421
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	9.08	10.11	9.83	2.63	7.61	17.42	5.99
Teaching assistantship	15.64	17.97	8.98	22.63	30.90	26.54	8.68
Research assistantship, traineeship, or internship	35.52	30.73	33.01	45.99	31.14	14.81	49.78
Fellowship, scholarship, or dissertation grant	29.28	30.98	38.09	20.36	18.90	30.18	24.23
Other ^c	10.48	10.20	10.10	8.38	11.45	11.04	11.31
Black or African American (number)	7,107	6,259	2,779	449	310	2,721	848
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	30.77	33.33	28.93	5.79	17.74	44.14	11.91
Teaching assistantship	10.89	11.20	6.59	25.84	24.19	12.02	8.61
Research assistantship, traineeship, or internship	16.53	15.15	19.79	24.05	15.81	8.86	26.77

Table SURD-6

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by race, ethnicity, sex, and historical broad field: 2017–21

(Percent distribution and number)

Primary source of support, race, ethnicity, and sex	All S&E	Science					Engineering
		All science	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	
Fellowship, scholarship, or dissertation grant	28.77	27.54	32.89	34.52	29.03	20.76	37.85
Other ^c	13.03	12.78	11.80	9.80	13.23	14.22	14.86
White (number)	86,498	72,556	30,011	14,059	5,960	22,526	13,942
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	13.79	15.07	13.35	4.37	9.51	25.52	7.13
Teaching assistantship	18.62	20.78	12.99	21.79	37.85	26.01	7.37
Research assistantship, traineeship, or internship	33.03	30.49	33.04	47.40	26.14	17.67	46.29
Fellowship, scholarship, or dissertation grant	25.34	24.95	31.48	20.48	16.76	21.22	27.34
Other ^c	9.22	8.71	9.15	5.96	9.73	9.58	11.87
More than one race (number)	4,169	3,550	1,445	626	317	1,162	619
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	14.03	15.72	11.76	5.11	10.09	27.88	4.36
Teaching assistantship	17.58	19.55	10.80	22.84	37.22	23.84	6.30
Research assistantship, traineeship, or internship	28.90	26.34	31.07	40.89	23.97	13.25	43.62
Fellowship, scholarship, or dissertation grant	33.61	32.96	41.11	26.84	22.40	29.00	37.32
Other ^c	5.88	5.44	5.26	4.31	6.31	6.02	8.40
Other race or race not reported (number)	1,422	1,143	450	179	139	375	279
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	12.24	13.65	12.00	D	D	21.87	D
Teaching assistantship	11.88	14.26	6.67	15.08	D	18.93	D
Research assistantship, traineeship, or internship	20.11	17.67	20.67	35.75	D	7.20	30.11
Fellowship, scholarship, or dissertation grant	19.69	20.38	26.00	12.29	D	18.40	16.85
Other ^c	36.08	34.03	34.67	D	D	33.60	44.44
Ethnicity not reported (number)	1,980	1,611	589	232	182	608	369
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	5.10	5.71	6.96	1.29	4.40	6.58	2.44
Teaching assistantship	4.49	4.90	2.89	6.03	8.24	5.43	2.71
Research assistantship, traineeship, or internship	7.12	6.39	6.79	12.93	6.59	3.45	10.30
Fellowship, scholarship, or dissertation grant	6.16	5.77	7.81	4.74	6.04	4.11	7.86
Other ^c	77.12	77.22	75.55	75.00	74.73	80.43	76.69
Female (number)	60,066	54,394	25,021	6,511	2,275	20,587	5,672
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	17.77	19.04	16.19	4.10	9.93	28.23	5.66
Teaching assistantship	16.45	17.37	10.72	21.86	35.16	22.05	7.65

Table SURD-6

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by race, ethnicity, sex, and historical broad field: 2017–21

(Percent distribution and number)

Primary source of support, race, ethnicity, and sex	All S&E	Science					Engineering
		All science	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	
Personal or family funds	17.34	18.46	16.00	4.01	10.52	27.39	5.70
Teaching assistantship	18.07	19.06	12.04	22.89	37.09	24.43	7.81
Research assistantship, traineeship, or internship	28.88	27.77	30.98	43.05	22.21	19.03	40.53
Fellowship, scholarship, or dissertation grant	27.25	26.34	31.82	25.74	22.35	20.21	36.81
Other ^c	8.45	8.39	9.15	4.30	7.82	8.94	9.16
More than one race (number)	2,172	1,994	835	266	91	802	178
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	17.86	19.21	13.89	6.02	5.49	30.67	2.81
Teaching assistantship	16.62	17.45	10.66	19.92	40.66	21.07	7.30
Research assistantship, traineeship, or internship	24.36	23.27	29.46	34.96	19.78	13.34	36.52
Fellowship, scholarship, or dissertation grant	35.91	35.01	40.84	36.84	26.37	29.30	46.07
Other ^c	5.25	5.07	5.15	2.26	7.69	5.61	7.30
Other race or race not reported (number)	596	527	222	54	D	223	D
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	15.10	16.70	16.67	D	D	21.52	D
Teaching assistantship	12.42	13.66	D	D	D	19.73	D
Research assistantship, traineeship, or internship	14.93	13.85	16.67	D	D	7.17	D
Fellowship, scholarship, or dissertation grant	20.81	20.68	26.58	D	D	16.59	D
Other ^d	36.74	35.10	D	D	D	34.98	D
Ethnicity not reported (number)	865	781	310	75	43	353	84
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	6.01	6.40	7.10	2.67	4.65	6.80	2.38
Teaching assistantship	3.70	3.97	2.26	4.00	11.63	4.53	1.19
Research assistantship, traineeship, or internship	4.62	4.35	5.48	6.67	2.33	3.12	7.14
Fellowship, scholarship, or dissertation grant	5.78	5.38	7.74	5.33	9.30	2.83	9.52
Other ^c	79.88	79.90	77.42	81.33	72.09	82.72	79.76
Male (number)	64,878	49,549	18,787	11,951	6,399	12,412	15,329
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	10.96	12.02	10.43	4.33	9.20	23.28	7.55
Teaching assistantship	17.86	21.11	12.60	21.44	35.22	26.39	7.35
Research assistantship, traineeship, or internship	34.55	31.03	33.31	47.29	26.68	14.16	45.95
Fellowship, scholarship, or dissertation grant	24.94	24.99	33.00	18.53	16.42	23.49	24.77
Other ^c	11.69	10.86	10.66	8.41	12.47	12.69	14.37
Hispanic or Latino ^d (number)	4,683	3,637	1,449	725	371	1,092	1,046

Table SURD-6

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by race, ethnicity, sex, and historical broad field: 2017–21

(Percent distribution and number)

Primary source of support, race, ethnicity, and sex	All S&E	Science					Engineering
		All science	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	11.49	12.59	8.76	4.41	9.70	24.08	7.65
Teaching assistantship	15.82	18.20	10.14	20.41	34.23	21.98	7.55
Research assistantship, traineeship, or internship	25.94	23.10	26.36	33.66	21.29	12.36	35.85
Fellowship, scholarship, or dissertation grant	35.60	35.39	44.86	32.14	23.99	28.85	36.33
Other ^c	11.15	10.72	9.87	9.38	10.78	12.73	12.62
Not Hispanic or Latino							
American Indian or Alaska Native (number)	151	125	48	22	D	50	D
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	21.19	23.20	27.08	D	D	28.00	D
Teaching assistantship	13.25	15.20	D	D	D	14.00	D
Research assistantship, traineeship, or internship	17.88	16.00	14.58	D	D	14.00	D
Fellowship, scholarship, or dissertation grant	28.48	26.40	35.42	D	D	26.00	D
Other ^c	19.21	19.20	D	D	D	18.00	D
Asian (number)	6,891	4,586	2,016	1,005	838	727	2,305
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	7.65	8.13	8.78	2.29	7.40	15.27	6.68
Teaching assistantship	15.41	18.84	8.43	23.98	28.40	29.57	8.59
Research assistantship, traineeship, or internship	38.82	32.84	32.64	48.26	32.70	12.24	50.72
Fellowship, scholarship, or dissertation grant	26.72	29.52	39.29	15.92	19.45	32.87	21.13
Other ^c	11.41	10.66	10.86	9.55	12.05	10.04	12.89
Black or African American (number)	2,749	2,181	880	265	194	842	568
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	25.39	28.29	25.45	5.66	15.98	41.21	14.26
Teaching assistantship	13.46	14.40	8.07	28.68	23.71	14.37	9.86
Research assistantship, traineeship, or internship	18.73	16.74	22.39	26.42	17.01	7.72	26.41
Fellowship, scholarship, or dissertation grant	28.08	26.59	32.61	27.92	26.29	19.95	33.80
Other ^c	14.33	13.98	11.48	11.32	17.01	16.75	15.67
White (number)	46,466	36,018	13,277	9,292	4,515	8,934	10,448
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	10.73	11.64	10.00	4.55	9.19	22.68	7.61
Teaching assistantship	19.08	22.53	14.17	21.22	38.10	28.43	7.22
Research assistantship, traineeship, or internship	36.61	33.24	35.64	49.63	27.40	15.59	48.22
Fellowship, scholarship, or dissertation grant	23.69	23.55	31.04	17.78	14.97	22.74	24.18

Table SURD-6

Primary source of support for U.S. citizen and permanent resident S&E doctorate recipients, by race, ethnicity, sex, and historical broad field: 2017–21

(Percent distribution and number)

Primary source of support, race, ethnicity, and sex	All S&E	Science					Engineering
		All science	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	
Other ^c	9.88	9.04	9.14	6.81	10.34	10.56	12.78
More than one race (number)	1,997	1,556	610	360	226	360	441
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	9.86	11.25	8.85	4.44	11.95	21.67	4.99
Teaching assistantship	18.63	22.24	10.98	25.00	35.84	30.00	5.90
Research assistantship, traineeship, or internship	33.85	30.27	33.28	45.28	25.66	13.06	46.49
Fellowship, scholarship, or dissertation grant	31.10	30.33	41.48	19.44	20.80	28.33	33.79
Other ^c	6.56	5.91	5.41	5.83	5.75	6.94	8.84
Other race or race not reported (number)	826	616	228	125	D	152	D
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	10.17	11.04	7.46	D	D	22.37	D
Teaching assistantship	11.50	14.77	D	D	D	17.76	D
Research assistantship, traineeship, or internship	23.85	20.94	24.56	D	D	7.24	D
Fellowship, scholarship, or dissertation grant	18.89	20.13	25.44	D	D	21.05	D
Other ^c	35.59	33.12	D	D	D	31.58	D
Ethnicity not reported (number)	1,115	830	279	157	139	255	285
All sources	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Personal or family funds	4.39	5.06	6.81	0.64	4.32	6.27	2.46
Teaching assistantship	5.11	5.78	3.58	7.01	7.19	6.67	3.16
Research assistantship, traineeship, or internship	9.06	8.31	8.24	15.92	7.91	3.92	11.23
Fellowship, scholarship, or dissertation grant	6.46	6.14	7.89	4.46	5.04	5.88	7.37
Other ^c	74.98	74.70	73.48	71.97	75.54	77.25	75.79

D = suppressed to avoid disclosure of confidential information.

^a Life sciences include agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.^b Total may include doctorate recipients who did not report sex. As a result, detail may not sum to total.^c Other includes foreign or unknown source of support and employer reimbursement or assistance.^d Hispanic or Latino may be any race; race categories exclude Hispanic origin.**Note(s):**

Data in this table include all U.S. citizen and permanent resident S&E doctorate recipients; temporary visa holders are excluded. American Indian or Alaska Native doctorate recipients with unknown or refused citizenship status are counted as U.S. citizens and thus are included. Data in this table refer to research doctorates only and differ from doctoral degree data in this report that are based on the Integrated Postsecondary Education Data System Completions Survey. The greatest differences are in psychology, education, and medical or other health sciences, which are fields with many professional doctorates.

Source(s):

National Center for Science and Engineering Statistics, special tabulations (2021) of the 2021 Survey of Earned Doctorates.

Science and Engineering Indicators